LISTING OF THE CLAIMS

What is claimed is:

1. (currently amended) A direct heating ~~pipe~~ tube which directly heats a fluid during the passage of the fluid, wherein in a desired portion of the ~~pipe~~ tube to be heated, a second heated ~~pipe~~ tube which is connected to a first heated ~~pipe~~ tube is provided outside the first heated ~~pipe~~ tube.

2. (currently amended) The direct heating ~~pipe~~ tube according to claim 1, wherein the second heated ~~pipe~~ tube is provided along a full length of the desired portion of the direct heating ~~pipe~~ tube to be heated.

3. (currently amended) The direct heating ~~pipe~~ tube according to claim 1, wherein the second heated ~~pipe~~ tube is provided in both end portions of the desired portion of the direct heating ~~pipe~~ tube to be heated.

4. (currently amended) The direct heating ~~pipe~~ tube according to claim 1, wherein the second heated ~~pipe~~ tube is provided in one end portion of the desired portion of the direct heating ~~pipe~~ tube to be heated.

5. (currently amended) The direct heating ~~pipe~~ tube according to claim 1, wherein an electrode portion is connected to the second heated ~~pipe~~ tube.

6. (currently amended) The direct heating ~~pipe~~ tube according to claim 5, wherein an electrode portion is connected directly to the second heated ~~pipe~~ tube.

7. (currently amended) The direct heating ~~pipe~~ tube according to claim 1, ~~characterized in that~~ wherein a change in gradient is provided in a wall thickness of the first heated ~~pipe~~ tube and/or the second heated ~~pipe~~ tube.

8. (currently amended) The direct heating ~~pipe~~ tube according to claim 1, wherein the direct heating ~~pipe~~ tube is a column or a heat ~~pipe~~ tube.

9. (currently amended) A method of heating a fluid passing through a ~~pipe~~ tube, wherein in a desired portion of the ~~pipe~~ tube to be heated, by use of a direct heating ~~pipe~~ tube which is constructed in such a manner that a second heated ~~pipe~~ tube connected to a first heated ~~pipe~~ tube is provided outside the first heated ~~pipe~~ tube, a fluid passing through the ~~pipe~~ tube is heated by connecting an electrode portion to the second heated ~~pipe~~ tube and heating the first heated ~~pipe~~ tube.

10. (currently amended) The direct heating ~~pipe~~ tube according to claim 5, wherein a change in gradient is provided in a wall thickness of the first heated ~~pipe~~ tube and/or the second heated ~~pipe~~ tube.

11. (currently amended) The direct heating ~~pipe~~ tube according to claim 10, wherein the direct heating ~~pipe~~ tube is a column or a heat ~~pipe~~ tube.

12. (currently amended) The direct heating ~~pipe~~ tube according to claim 2, wherein the direct heating ~~pipe~~ tube is a column or a heat ~~pipe~~ tube.

13. (currently amended) The direct heating ~~pipe~~ tube according to claim 3, wherein the direct heating ~~pipe~~ tube is a column or a heat ~~pipe~~ tube.

14. (currently amended) The direct heating ~~pipe~~ tube according to ~~claims~~ claim 4, wherein the direct heating ~~pipe~~ tube is a column or a heat ~~pipe~~ tube.

15. (currently amended) The direct heating ~~pipe~~ tube according to claims 5, wherein the direct heating ~~pipe~~ tube is a column or a heat ~~pipe~~ tube.

16. (currently amended) The direct heating ~~pipe~~ tube according to claims 6, wherein the direct heating ~~pipe~~ tube is a column or a heat ~~pipe~~ tube.

17. (currently amended) The direct heating ~~pipe~~ tube according to claims 7, wherein the direct heating ~~pipe~~ tube is a column or a heat ~~pipe~~ tube.

18. (currently amended) The direct heating ~~pipe~~ tube according to claims 8, wherein the direct heating ~~pipe~~ tube is a column or a heat ~~pipe~~ tube.

19. (currently amended) The direct heating ~~pipe~~ tube according to claim 4, wherein an electrode portion is connected to the second heated ~~pipe~~ tube.

20. (currently amended) The direct heating ~~pipe~~ tube according to claims 19, wherein the direct heating ~~pipe~~ tube is a column or a heat ~~pipe~~ tube.